APPENDIX OF RELATED PROCEEDINGS

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte MARC ODRICH,
KENNETH GREENBERG, JEROME A. LEGERTON,
CHARLES R. MUNNERLYN, and JOHN K. SHIMMICK

Appeal 2008-1260
Application 10/600,027
Technology Center 3700

Decided: MAY 21, 2008

Before ERIC GRIMES, LORA M. GREEN, and FRANCISCO C. PRATS, *Administrative Patent Judges*.

PRATS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a method and a system for treating the cornea to mitigate presbyopia. The Examiner has rejected the claims as lacking written description and being obvious. We

have jurisdiction under 35 U.S.C. § 6(b). We affirm the obviousness rejection, but reverse the written description rejection.[1]

STATEMENT OF THE CASE

"With aging, a condition of the eye known as presbyopia develops. With this condition, the crystalline lens of the eye loses the ability to focus on near objects when the eye is corrected for far-vision" (Spec. 1). Presbyopia can be treated with bifocal eyeglasses, in which "one portion of the lens is corrected for far-vision, and another portion of the lens is corrected for near-vision" (*id.* at 2).

The Specification discloses "a method and system for performing ablative photodecomposition of the corneal surface that is capable of providing relatively smooth transition zones along with accurate sculpting of the anterior or other corneal surface to effect simultaneous symmetric or asymmetric refractive and presbyopic corrections" (*id.* at 6). Thus, the "optical zone" of the cornea sculpted by the ablative treatment can improve both the near and far vision of a presbyopic subject; "[p]referably, the central portion of the optical zone provides near-vision correction and the peripheral portion of the optical zone provides far-vision correction" (*id.*).

Claims 1-15 are pending and on appeal (App. Br. 3). Claims 1 and 10 are representative and read as follows:

> 1. A method of treating a cornea of an eye of a patient to mitigate presbyopia, the eye having a pupil and a cornea, the method comprising:

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[1] In this decision we consider only those arguments actually made by Appellants. Arguments that Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

identifying a multifocal ablation shape having a first region providing a near vision correction and a second region providing a far vision correction;

adjusting an ablation cut profile of the multifocal ablation shape in response to the size of the pupil so as to provide a balance of the near vision correction provided by the first region and the far vision correction provided by the second region for the patient;

ablating the eye with a series of laser beam pulses according to the adjusted ablation cut profile.

10. A system for treating a cornea of an eye of a patient to mitigate presbyopia with a multifocal ablation shape, the eye having a pupil and a cornea, the system comprising:

a laser for making a beam of an ablative light energy;

a processor in electrical communication with the laser; and

a tangible medium coupled to the processor and having stored instructions that, if executed by the processor, will cause the processor to perform operations comprising:

controlling a distribution of a series of laser beam pulses to ablate the multifocal shape on the eye, the multifocal ablation shape producing a first region of the cornea providing a near vision correction and a second region of the cornea providing a far vision correction; and

determining the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape, where the distribution is determined in response to a signal related to a size of the pupil so as to balance the near vision correction and the far vision correction of the multifocal treatment for the patient.

The Examiner applies the following documents in rejecting the claims:

Frey	US 6,027,494	Feb. 22, 2000
Largent	US 6,312,424 B1	Nov. 6, 2001

David R. Hardten, et al., *Correction of High Myopia with the Excimer Laser: VISX 2015, VISX 2020, and the Summit Experience*, Corneal Laser Surgery 77-91 (Chapter 6, 1995).[2]

The following rejections are before us for review:

Claims 1-9 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement (Ans. 3-4).[3]

Claims 10-15 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of Frey and Largent (Ans. 4).

WRITTEN DESCRIPTION

ISSUE

The Examiner contends that the claims contain "subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention" (Ans. 3). Specifically, the Examiner contends that "[t]he originally filed disclosure does not teach how to preoperatively determine the factors which are disclosed as the things beings adjusted for, as all these are . . . determinable only after the ablation has already taken place" (*id.*)

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[2] The Examiner refers to this document as "Sher" (*see* Ans. 3).
[3] This document is not paginated. We therefore refer to page numbers as if the document was paginated consecutively beginning with the first page.

The Examiner points out that claim 1 recites "adjusting an ablation profile," and contends that "the only disclosure in the originally filed disclosure related to adjusting an ablation is in paragraph [0022], which recites 'adjusting the ablation to compensate for effecting the final geometry of the healed cornea'" (*id.* at 3-4). The Examiner cites Hardten as evidence of "great variability in the healed corneal curvature compared to the desired or predicted final curvature" of laser-ablated corneas of patients receiving vision correction (Ans. 5).

Appellants contend that a person of ordinary skill in the art would have recognized that they possessed the claimed subject matter at the time of filing "because claims 1-9 as originally filed are considered part of the specification and adequately supported, and because the subject matter of original claims 1-9 is additionally well supported throughout the specification and figures of the application as filed." (App. Br. 5).

The issue with respect to this rejection, therefore, is whether the Examiner erred in finding that the Specification failed to provide adequate descriptive support for claims 1-9.

FINDINGS OF FACT ("FF")

1. Claim 1 recites a method of treating a patient's cornea to mitigate presbyopia. In the method's first step, one must identify a multifocal ablation shape having a first region providing a near vision correction and a second region providing a far vision correction.

In the second step, an ablation cut profile of the multifocal ablation shape is adjusted in response to the size of the pupil so as to provide a balance of the near vision correction provided by the first region and the far vision correction provided by the second region. In the third step, the eye is

ablated with a series of laser beam pulses according to the adjusted ablation cut profile.

2. Appellants' Figure 1, reproduced below, "illustrates a schematic side view of a cornea 200 treated with the invention" (Spec. 10):

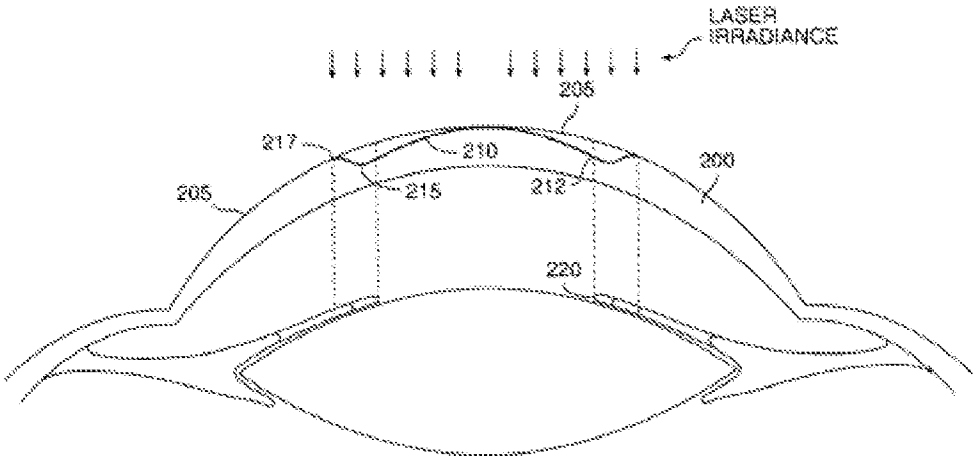

FIG. 1

The Figure shows "initial anterior surface 205 of the cornea 200 [which] has been reshaped to a desired healed profile. The desired healed profile includes anterior optical surface 210 and anterior transition surface 215. The anterior optical surface 210 has a multifocal aspheric shape that corrects for near-vision centrally and far-vision peripherally" (Spec. 10).

3. The Specification discloses "ablation of an optical zone that substantially matches the area of the pupil. For presbyopic patients, the maximum pupil diameter is typically about 5 mm. Therefore, it is an aspect of the invention that the ablated optical zone have a diameter of about 5 mm, and be user selectable (by the user of the ablation system) to a diameter between 3 and 7 mm" (Spec. 6).

4. Regarding the variability between the desired corneal shape and the actual shape of the healed cornea achieved by laser surgical correction, the Examiner summarizes the relevant Hardten disclosures as follows:

> This is clear from the fifth full paragraph in the first column on page 78, showing a mean variation of 2.1 Diopters, and the graph in Figure 6-1, showing variations as high as 4 Diopters in the various surgical outcomes; from the third paragraph in column 2 on page 81, discussing only 74% of the patients being within 2 Diopters of the attempted correction; and a subsequent study, discussed in the third paragraph in column 2 on page 82, discussing only 50% of the patients being within 2 Diopters of the attempted correction; and lastly the full paragraph in column 2, on page 85, and Figure 6-9 on page 86 show a wide variation in refractive outcome (up to plus or minus 2 Diopters). This evidence remains unrebutted by any factual showing on appellant's part.

(Ans. 5.)

PRINCIPLES OF LAW

The written description requirement obliges an applicant to "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed*." *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991).

To meet the initial burden of establishing a prima facie case of unpatentability based on the written description requirement, the Examiner must "present[] evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims." *In re Alton*, 76 F.3d 1168, 1175 (Fed. Cir. 1996). Thus, "[i]f . . . the specification contains a description of the claimed invention, albeit not *in ipsis verbis* (in the identical words), then the examiner . . ., in order to meet

the burden of proof, must provide reasons why one of ordinary skill in the art would not consider the description sufficient." *Id.*

Moreover, a broad claim does not lack written description merely because it encompasses inoperative embodiments. *Capon v. Eshhar*, 418 F.3d 1349, 1359 (Fed. Cir. 2005) ("It is not necessary that every permutation within a generally operable invention be effective in order for an inventor to obtain a generic claim, provided that the effect is sufficiently demonstrated to characterize a generic invention.").

ANALYSIS

We agree with Appellants that the Examiner has not established a prima facie case of unpatentability based on the written description requirement. Appellants' Figure 1 shows a desired shape for a laser-ablated cornea that is disclosed as providing both near and far vision correction (*see* FF 2). Thus, because it identifies a multifocal ablation shape having a first region providing a near vision correction and a second region providing a far vision correction, we agree with Appellants that their original disclosure describes the first step in claim 1's method.

Because the Specification discloses that the optical zone to be ablated in the multifocal ablation shape should substantially match the area of the patient's pupil (FF 3), we also agree with Appellants that the Specification describes claim 1's second step. The Specification discloses ablating the cornea to achieve the desired shape (FF 3), thus describing claim 1's third step. Therefore, because the Specification discloses the steps recited in claim 1's process, we agree with Appellants that one skilled in the art would have recognized that Appellants possessed the claimed method at the time the application was filed.

The Examiner argues that, by itself, the mere presence of originally filed claims is "an insufficient basis for enablement. For example, if an patent application were filed containing claims which recited only an antigravity device, with no disclosure concerning the component parts or the arrangement and construction thereof, this would not be enabling, despite the existence of the claims in the originally filed application" (Ans. 4). The Examiner urges that the failure of Appellants' disclosure to provide adequate support for the claimed subject matter is evidenced by the Hardten article, which "clearly shows great variability in the healed corneal curvature compared to the desired or predicted final curvature" (*id.* at 5).

We are not persuaded by these arguments. While the Examiner urges that Hardten shows that post-surgery healing can significantly affect laser surgery's corrective effect, the Examiner also acknowledges that Hardten shows that a significant percentage of patients, as high as 74% in some studies (*see* FF 4), derived a substantial benefit from the surgery. Therefore, because claim 1 requires only that the described method "mitigate presbyopia," and because Hardten shows that a substantial portion of patients receiving corneal laser surgery derived improvement therefrom, we do not agree with the Examiner that the variability in surgical outcomes caused by post-surgery healing shows that Appellants failed to possess the claimed subject matter at the time of filing.

Moreover, as discussed above, a broad claim does not lack written description merely because it encompasses inoperative embodiments. *See Capon v. Eshhar*, 418 F.3d at 1359. Thus, the fact that Hardten discloses that laser eye correction does not yield a perfect result in every circumstance

would not have negated the skilled artisan's recognition that Appellants possessed the claimed subject matter at the time of filing.

We note that the Examiner uses the term "enablement" to argue this rejection (*see* Ans. 4). Again, however, given the claims' requirement that the method need only "mitigate presbyopia," combined with Hardten's disclosure that a substantial percentage of patients derived significant benefits from corrective corneal laser surgery (FF 4), we do not agree with the Examiner that the variability in surgical outcomes caused by post-surgery healing shows that one skilled in the art would be unable to make and use the claimed invention with undue experimentation. *Cf. In re Cortright*, 165 F.3d 1353, 1357-59 (Fed. Cir. 1999) (claims to "restoring hair growth" enabled by disclosure of three-fold increase in hair number, "filling-in some," and "fuzz").

In sum, we agree with Appellants that the Examiner failed to make out a prima facie case of unpatentability based on lack of written description. We therefore reverse the Examiner's written description rejection of claims 1-9.

OBVIOUSNESS

ISSUE

Claims 10-15 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of Frey and Largent (Ans. 4).

The Examiner cites Frey as teaching "a laser surgical system including a laser and a processor and scaling the ablation to the pupil size," and Largent as teaching "designing a corneal ablation to mitigate presbyopia" (*id.*). The Examiner contends that one of ordinary skill would have considered it obvious to use Frey's device on a presbyopic subject,

"since this condition is correctable with laser sculpture as taught by Largent, or to employ the pupil scaling device of Frey in the presbyopia treating system of Largent, since this would reduce the halo effect and improve night vision, as taught by Frey, thus producing a device such as claimed" (*id.*).

Appellants contend that the Examiner failed to establish a prima facie case of obviousness because "there is no suggestion or motivation to combine the cited references, and even if combined, the cited references, alone or in combination, fail [to] teach or suggest all claim limitations" (App. Br. 9). Appellants "present[] their position for the pending claims as a single group, using claim 10, from which other rejected claims directly or indirectly depend, as a representative claim" (*id.*).

The issue with respect to this rejection, therefore, is whether the Examiner erred in concluding that one of ordinary skill would have considered claim 10 prima facie obvious in view of Frey and Largent.

FINDINGS OF FACT

5. Claim 10 recites a system for treating a cornea to mitigate presbyopia with a multifocal ablation shape. The system has a laser for making a beam of an ablative light energy, a processor in electrical communication with the laser, and a tangible medium coupled to the processor that has stored instructions.

Claim 10 states that the stored instructions, if executed by the processor, will cause the processor to perform the following operations:

(a) control a distribution of a series of laser beam pulses to ablate the multifocal shape on the eye, the multifocal ablation shape producing a first region of the cornea providing a near vision correction and a second region of the cornea providing a far vision correction; and

(b) determine the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape, the distribution being determined in response to a signal related to a size of the pupil so as to balance the near vision correction and the far vision correction of the multifocal treatment for the patient.

6. Frey discloses "a system and method for determining the dark adapted pupil size of a patient and reshaping the cornea of the eye based on the dark adapted pupil size" (Frey, col. 1, ll. 6-9). Specifically, Frey's system uses "[p]hotorefractive keratectomy (PRK) . . .[,] a procedure which typically utilizes an excimer laser beam to vaporize 'ablate' corneal tissue in a precise manner to correct for focussing deficiencies of the eye" (*id.* at col. 1, ll. 15-19).

7. Frey discloses that if the portion of the cornea corrected by laser ablation, or "optical zone," is "smaller than the patient's dark adapted[, i.e. substantially dilated,] pupil size, the patient's night vision is affected. Typically, the patient's vision will be hazy or somewhat blurred, and the patient may perceive halos around bright lights" (Frey, col. 1, ll. 44-48).

8. Frey's system "comprises a first apparatus for determining dark adapted pupil size of an eye; and a second apparatus for reshaping the cornea of the eye in an area approximately equal to the dark adapted pupil size as determined by the first apparatus" (Frey, col. 2, ll. 23-27; *see also* Figure 1A). Frey discloses that once the first apparatus measures a patient's dilated pupil size, the "measured diameter of the [pupil] size is then input into a program which is used to run the cornea shaping apparatus" (*id.* at col. 3, ll. 32-34). Frey states that "[t]he zone which is ablated under the corneal sculpting program is just a little larger in diameter than the dark diameter of

the adapted pupil to allow for a smooth transition between the treated and untreated portion of the eye" (*id.* at col. 3, ll. 34-38).

9. Frey discloses that its method "allows for customizing the ablation zone of the patient's dark adapted pupil size to eliminate the halo problem" (Frey, col. 4, ll. 23-25). Frey also discloses that the ablation process itself can be customized depending on pupil size; "[f]or example, if the surgical method requires a 5 mm zone, ablation will only have to go down about 10 microns deep for one diopter of correction. For a 6 mm zone, the ablation would go down about 13 to 15 microns deep for each diopter of correction" (*id.* at col. 4, ll. 12-16).

10. Largent discloses that "[i]t is not uncommon . . . for a patient to require correction for both near and far distances" (Largent, col. 1, ll. 17-18). Largent discloses a method of correcting vision that includes providing the corneal surface with two differently shaped regions, a first region having "a surface configuration which provides a first vision correction power," and a second region having "a surface configuration which provides a second vision correction power which is different from the first vision correction power to enhance vision at first and second different distances, respectively. For example, the distances may be near and far distances to thereby provide a bifocal effect" (*id.* at col. 1, ll. 34-44).

11. Largent discloses that laser energy is a preferred method of reshaping the cornea for multifocal correction (Largent, col. 2, ll. 23-24). Largent states that, although laser reshaping "can be accomplished by scanning a laser beam across the cornea, it is preferred to utilize a mask which appropriately modulates the laser energy so the laser energy can shape the

regions of the cornea to provide the desired vision correction powers" (*id.* at col. 2, ll. 24-28).

PRINCIPLES OF LAW

Recently addressing the issue of obviousness, the Supreme Court reaffirmed that it is obvious to use an art-recognized solution to solve a known problem:

> When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that is was obvious under § 103.

KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1742 (2007).

The Supreme Court also noted that the analysis under 35 U.S.C. § 103 "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 1741. The Court further advised that "[a] person of ordinary skill is . . . a person of ordinary creativity, not an automaton." *Id.* at 1742.

Regarding hindsight reasoning, the Court stated that "[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. Rigid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it." *Id.* at 1742-43 (citations omitted).

ANALYSIS

We do not agree with Appellants that the Examiner failed to make out a prima facie case of obviousness based on Frey and Largent. Frey discloses a system that uses precisely directed laser energy to reshape a patient's cornea, thereby correcting vision deficiencies (FF 6). Thus, Frey's system meets claim 10's limitation requiring a cornea-ablating laser.

Frey discloses that, because it reshapes the cornea according to the diameter of a patient's dilated pupil, its system advantageously avoids the problems of hazy, blurred vision and halos that can occur in vision-correcting laser surgery (FF 7). To achieve this advantage, Frey's system includes an apparatus that determines the size of a patient's dilated pupil (FF 8).

Frey's pupil-measuring apparatus is connected to a cornea-shaping apparatus (*see, e.g.,* Frey, Figure 1A (FF 8)). Frey's cornea-shaping apparatus is controlled by a "corneal sculpting program" (Frey, col. 3, l. 35 (FF 8)). The pupil-measuring apparatus inputs the data regarding the measured pupil size into the corneal sculpting program, which in turn directs the cornea-shaping apparatus to ablate the appropriately-sized optical zone (FF 8).

Because the cornea-shaping apparatus processes input regarding pupil size from the pupil-measuring apparatus, and because Frey's system has a pupil-size dependent corneal sculpting program that directs the cornea-shaping apparatus, we agree with the Examiner that Frey's system meets claim 10's limitation requiring the system to have a processor and tangible medium with instructions directing laser pulses to be distributed according to the patient's pupil size.

Frey's system does not have instructions controlling the laser's pulses such that the cornea is ablated to achieve a multifocal shape that corrects near and far vision. However, Largent discloses that it is desirable to use ablative laser energy to reshape a patient's cornea to have one region shaped to correct near vision, and another region shaped to correct far vision (FF 10-11).

Based on these disclosures, we agree with the Examiner that claim 10 would have been prima facie obvious to a person of ordinary skill in the art. A person of ordinary skill using Frey's system would have recognized from Largent that patients with deficient vision commonly required correction of both near and far vision (FF 10). One of ordinary skill would have further recognized from Largent that a solution to this common problem was to use ablative laser energy to reshape the patients' corneas to provide one region that corrects the near vision and a separate region that corrects the far vision (FF 10-11).

A person of ordinary skill would therefore have been prompted by Largent to include in Frey's system instructions directing the processor to determine the distribution of the laser's pulses so as to provide separate regions on the cornea to correct near and far vision, as recited in claim 10. Thus, because claim 10 in effect modifies Frey's system such that it applies an art-recognized solution to the known problem of correcting patients' near and far vision, we agree with the Examiner's prima facie case of obviousness.

Appellants argue that "the Examiner has not shown where the cited references teach or suggest 'determining the distribution of laser beam pulses to ablate the first *and* second regions of the *multifocal ablation shape*,

where the distribution is determined in response to a signal related to *size of the pupil* . . .', as recited in claim 10" (App. Br. 10). Specifically, Appellants contend that Frey's disclosure is limited to "adjusting just one aspect of the ablation region in response to pupil size - i.e., the outer periphery or the overall extent of the region of the cornea subject to ablation," and that Frey therefore "fails to teach determining the distribution of laser beam pulses to ablate *multiple regions* of the multifocal ablation shape, particularly wherein the distribution is determined in response to a signal related to a size of the patient's pupil, as required by the current claims" (*id.*).

Appellants contend that Largent fails to remedy Frey's shortcomings because Largent discloses "a 'one size fits all' outer ablation shape and does not teach adjusting any aspect of an ablation shape based on pupil size" (*id.*). Appellants contend that, "[w]hile Largent's disregard of pupil size variations among different patients in determining the size for each of it[s] multiple regions may have been consistent with the thinking in the field at the time, the teachings of Largent are directly contrary to the invention as defined by claim 10" (*id.*). Appellants further contend that "the specific disregard of pupil size in the teachings of Largent would actually weigh against the proposed modification of Largent with the teachings of Frey to include adjusting ablation shape based on pupil size" (Reply Br. 7).

Appellants' arguments do not persuade us that the Examiner's conclusion of obviousness is erroneous. Appellants' arguments point out the shortcomings of each of the references when *separately* compared to the claims.

However, it is well settled that "[n]on-obviousness cannot be established by attacking references individually where the rejection is based

upon the teachings of a combination of references. . . . [The reference] must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole." *In re Merck & Co.,* 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Thus, as discussed above, when the references are properly viewed in combination with each other, a person of ordinary skill using Frey's system would have been prompted by Largent to include in Frey's system instructions for reshaping the cornea to achieve correction for both near and far vision. Moreover, because Frey discloses that matching the size of the reshaped portion of the cornea to the patient's dilated pupil size alleviates the blurred, hazy, and haloed vision problems that can result from corrective laser surgery (*see* FF 7, 9), we do not agree with Appellants that one of ordinary skill viewing the references in combination would have disregarded pupil size when applying Largent's near and far vision correction techniques to Frey's system.

Appellants argue that even if the two references' disclosures were combined, one would not arrive at the claimed invention because "Frey's approach changes only the overall size of the treatment *without any* change in shape. Thus, only one aspect of the ablation region (i.e., overall diameter of the ablated region) would be adjusted based on pupil size in the hypothetical combination of cited references" (App. Br. 11). Therefore, Appellants urge, the asserted combination of references would not teach "determining the distribution of laser beam pulses to ablate the *first and second regions of the multifocal ablation shape*, wherein the distribution is determined in response to a signal related to a size of the patient's pupil, as recited by claim 10" (*id.*; *see also* Reply Br. 8). Appellants further urge that

the Examiner improperly relied on unsupported statements in finding that the references suggested these limitations (App. Br. 11-13).

We do not find Appellants' arguments persuasive. As pointed out above, the Supreme Court recently noted that the analysis under 35 U.S.C. § 103 "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007).

In the instant case, we agree with the Examiner that one of ordinary skill in the art using Frey's system, being a person of ordinary creativity and common sense, *KSR*, 127 S. Ct. at 1742-43, would have reasonably inferred from Largent that it was desirable to reshape Frey's pupil-sized corneal optical zone into separate regions that corrected for both near and far vision, in patients requiring those vision corrections. Because failing to include both of Largent's reshaped corrective regions within Frey's pupil-sized optical zone would have defeated the purpose of Largent's multifocal correction, we agree with the Examiner that one of ordinary skill using Frey's system would have been prompted to modify the system with instructions directing the processor to determine the multifocal correction based on the optimal pupil-sized operative zone. Thus, we agree with the Examiner that claim 10's limitation, that the system includes instructions to determine multifocal-shaping laser pulse distribution "in response to a signal related to a size of the pupil," would have been obvious to one of ordinary skill in view of Frey and Largent.

Appellants argue that the Examiner failed to establish adequate motivation for combining the cited references (App. Br. 13). Specifically,

Appellants urge that "if a presbyopia condition is correctable with the system of Largent as stated by the Examiner, one of ordinary skill would have no reason or motivation to then select a different system for presbyopia correction, and certainly would not be motivated to select the device of Frey," because Frey does not teach correcting presbyopia or ablating multiple focal regions of the eye (*id.* at 14). Moreover, Appellants argue, "Largent's focus on a 'one size fits all' ablation shape that specifically disregards pupil size, and which would not easily be adaptable for scaling of the outer periphery of the ablation shape, as taught by Frey, specifically weighs against the combination proposed by the Examiner" (*id.*).

We are not persuaded by these arguments. Appellants do not point to, nor do we see, any evidence that Frey's system would not have been adaptable to Largent's process. Rather, Frey discloses that its system provides a customized corneal sculpting based on a patient's pupil size, the reshaping including control of the depth of ablation required to provide a specific correction (*see* FF 9).

Moreover, because Frey explicitly discloses that its pupil-size-based eye reshaping system alleviates the blurred, hazy, and haloed vision problems that can result from corrective laser surgery (*see* FF 7, 9), we do not agree with Appellants that one of ordinary skill would have lacked motivation to use Frey's system to perform Largent's multifocal correction. Thus, given Frey's advantages of scaling the reshaped corneal zone based on pupil size, we do not agree that a person of ordinary skill practicing Largent's multifocal correction would have ignored Frey's disclosure.

Therefore, because we agree with the Examiner that a person of ordinary skill in the art would have considered claim 10 prima facie obvious

in view of Frey and Largent, we affirm the Examiner's obviousness rejection of claim 10. Because they were not argued separately (*see* App. Br. 9), claims 11-15 fall with claim 10. *See* 37 C.F.R. § 41.37(c)(1)(vii).

SUMMARY

We reverse the Examiner's rejection of claims 1-9 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

We affirm the Examiner's rejection of claims 10-15 under 35 U.S.C. § 103(a) as being obvious in view of Frey and Largent.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR 1.136(a).

AFFIRMED-IN-PART

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